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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,398	10/14/2003	William J. Murphy	JJK-0338 (P1998J015)	6847

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EXAMINER	
NGUYEN, TAM M	
ART UNIT	**PAPER NUMBER**
1764	

DATE MAILED: 08/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/686,398	MURPHY ET AL.	
	Examiner	Art Unit	
	Tam M. Nguyen	1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2/20/04; 1/26/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The expression "preferably halogen, yttria, magnesia" in lines 4-5 of claim 8 renders the claim indefinite because it is unclear if the amorphous material such as phosphorous, boron, and rare-earth oxides are parts of the claim. Therefore, the scope of the claim cannot be ascertained

The expression "(or FCI)" in line 3-4 of claim 17 renders the claimed indefinite because it is unclear if the limitation "FCI" is a part of the claimed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-3 and 10-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cook et al. (6,013,171).

Cook discloses a process for dewaxing a hydrocarbon feed from a mineral or synthetic source. The feed is first passed into a hydrotreating zone to remove sulfur and nitrogen compounds. The hydrotreating zone is operated at a temperature of from 540 - 750° F, at a space velocity of 0.1 to 2.0 v/v/hr, at a pressure of from 500 – 3,000 psig, and at hydrogen treat rates of from 500-5,000 SCF/B. The hydrotreating zone comprises a catalyst containing a metal of Group VI and a metal of Group VIII. The hydrotreated feed is then passed into a hydroisomerization zone to produce an isomerate which is then passed into a catalytic dewaxing zone to produce a lube oil. The hydroisomerization catalyst comprises an amorphous silica-alumina support, a metal of Group VIB and VIII. The dewaxing zone comprises a catalyst comprising a molecular sieve (e.g., Ferrierites), amorphous material (e.g., rare-earth oxides), a metal of group VIII, and a support. It is noted that Cook does not specifically disclose that the hydroisomerization zone is

operated so that the wax content of the hydrotreating feed to reduced to below about 40 wt. % based on the hydrotreating feed. However, the hydroisomerization zone of Cooke is essentially the same as the claimed hydroisomerization zone. It would be expected that the hydroisomerization zone of Cook would reduce wax content as claimed. (See abstract; col. 2, line 16 through col. 5, line 51; examples 4)

Cook does not disclose that the hydrocarbon feed comprises at least 50 wt. % of wax, does not disclose that the molecular sieve is combined with a suitable porous binder or matrix material, does not disclose that the lube oil basestock produced comprises at least about 75 wt.% of iso-paraffins and has a free carbon index lower than 12, and does not disclose that the second zone (hydroisomerization zone) and third reaction (dewaxing zone) are combined to form one second reaction stage.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Cook by utilizing a feed comprising at least 50 wt. % of wax because a feed comprising any amount wax can be used in the process. Evidently, Cook teaches that a Fischer-Tropsch feed with a wax content greater 90 wt. % is used in the process. It would be expected a feed with at least 50 wt. % of wax would be successfully treated in the process of Cook.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process by combining the molecular sieve with a binder or a matrix because a binder or a matrix would enhance the durability of catalyst.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Cook by combining the hydroisomerization

zone and the dewaxing zone in one common zone because both zones are operated at similar conditions. Therefore, it would be expected that the results would be the same or similar when operating the hydroisomerization zone and the dewaxing zone in either one reaction zone or in two different reaction zones.

Since the modified process of Cook is essentially the same as the claimed process, it would be expected that the modified process of Cook would produce a lube oil base product having characteristics as claimed.

Claims 4-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cook et al. (6,013,171) as applied to claim 1 above, and further in view of Brandes et al. (5,977,425).

Cook does not specifically disclose that a hydrotreating catalyst as claimed in claim 4.

Brandes teaches a hydrotreating catalyst which is the same catalyst as claimed in claim 4. (See col. 6, lines 51-56).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Cook by utilizing a hydrotreating catalyst as taught by Brandes because Cook teaches that any known hydrotreating catalyst can be used in the hydrotreating process.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re*

Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 6, 7, 11, 13, 17, and 20 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 5, 6 and 7 of U.S. Patent No. 6,620,312. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims draw to a process to produce lube oil by employing a hydrotreating step, hydroisomerization step, and dewaxing step. The present claimed set does not claim a step of separating the hydrotreated feed into a lube fraction as claimed in the Patented claimed set. However the present claimed set does not exclude the separation step.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam M. Nguyen whose telephone number is (571) 272-1452. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tam M. Nguyen
Examiner
Art Unit 1764

TN